

Constellations

A region of the sky that contains a recognizable star pattern and is used today to

1. Help organize the sky- describes the location of objects in space

In the past they were used to-

1. Help people travel- early sailors
2. Tell the season- -Change from season to season. Except *circumpolar stars* (seen all the time)
3. Tell the time of day-based on their location.

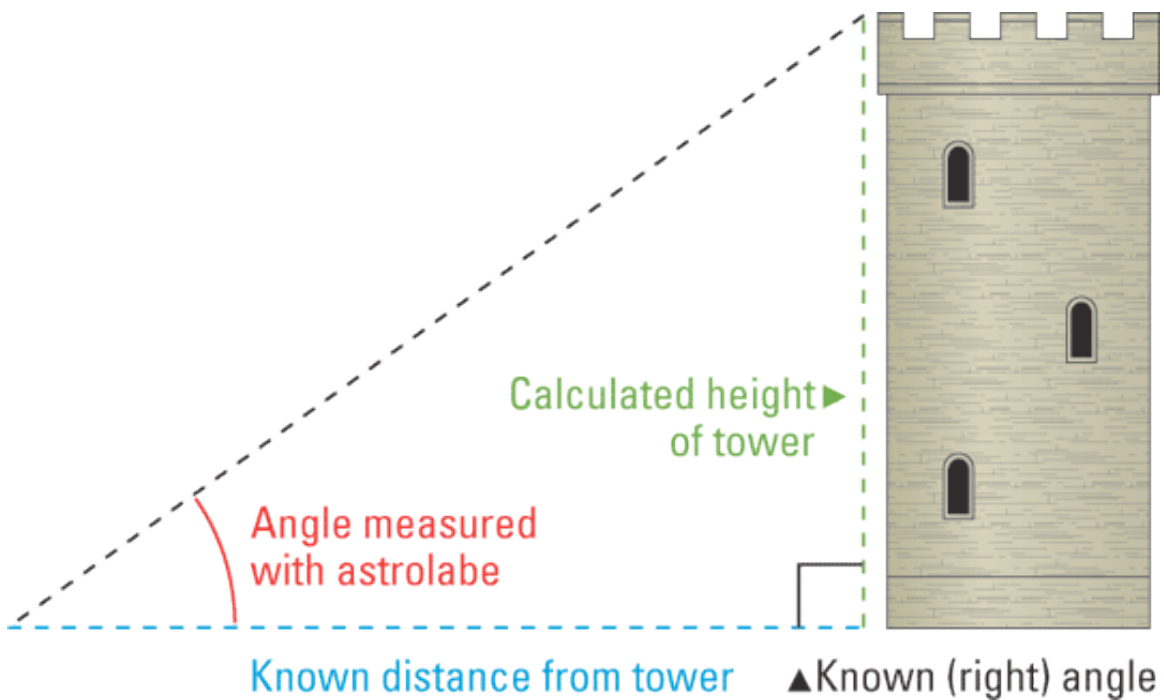
The Northern and Southern Hemispheres see different constellations throughout the year.

Finding stars location in the sky

1. Astrolabe

Finds the star's location in reference to where you are

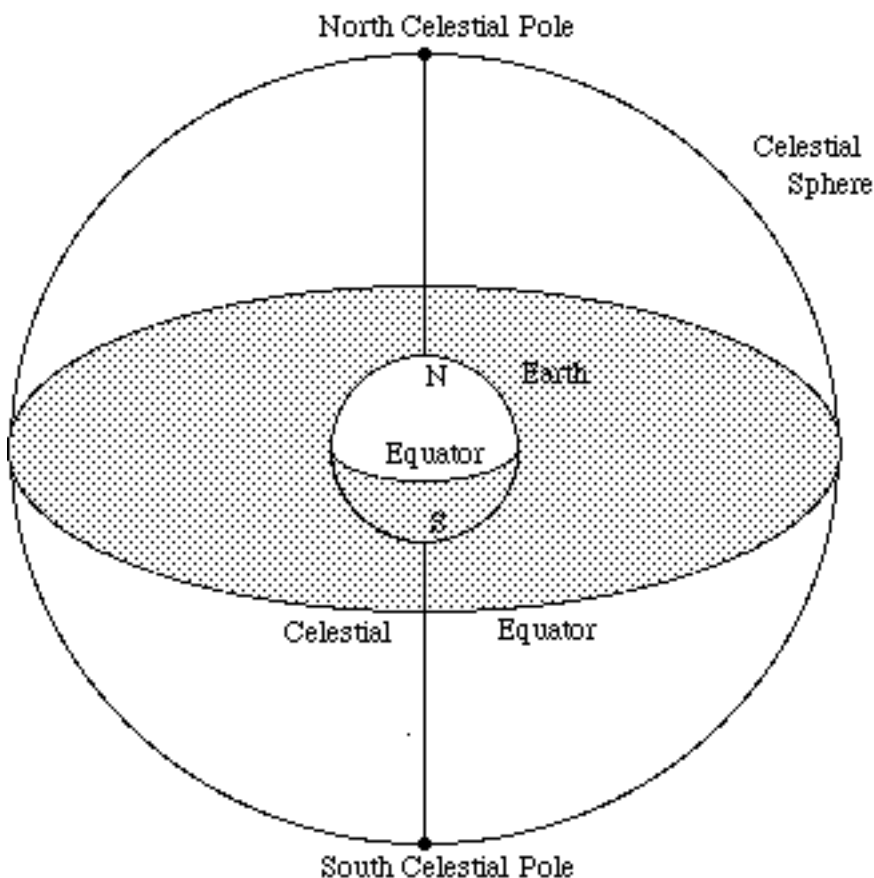
Must be done at night



2. Celestial Sphere

Finds a star's location in relation to the Earth without an observer

This is better than an astrolabe because the location never changes and you can use it any time of day



Measuring Distance in Space

A star's distance is measured in light years

Light year- how far light can travel in a year

Clues to Understanding the Universe

Doppler Effect For Light in Space

- Objects moving quickly away from an observer emit a **reddish glow**

- Objects moving quickly towards an observer emit a **bluer glow**